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DIRECTOR

ORIGINAL
(RSC)

STATE OF MARYLAND
WATER RESOURCES ADMINISTRATION
ANNAPOLIS, MARYLAND 21401

TO: Bill Yanovitch
FROM: George Harman
VIA: Paul Slunt
DATE: July 14, 1975
SUBJECT: Biological conditions of Mill Creek in the Little Elk Creek drainage basin.

In response to Mr. Lewandowski's memorandum to Paul Slunt dated June 19, 1975, a biological survey of the watershed which drains the former disposal site of the Galaxy Chemical Co. was conducted on July 2, 1975.

The data from this survey when compared with the data from previous surveys (Sept. and Nov. 1974) indicates that the condition of the stream has remained static. The continued presence of the pollution tolerant midge Chironomus sp. at stations B-1 and B-1A and the absence of a diverse fish population at station M-1 indicates that a polluted condition exists.

In view of the continuing seepage of chemicals from the hillside above station B-1 (see map) it appears that the polluted condition of Mill Creek will probably continue for several years unless some measures are taken to control or treat the seepage.

Attached please find the data from this survey and a map of the sampling locations. Please advise if you have any questions.

GHW:tmc

Attachment

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MACROINVERTEBRATE DATA

ORIGINAL

ORGANISMS	No. of Organisms per Sample (3 sq. ft.)			
	STATIONS			
	B-1	B-1A	B-2	M-1
Chironomidae (midges)	75'00030	75'00034	75'00032	75'00033
<u>Chironomus</u> sp.	1,536	2,200	----	----
<u>Fentaneuriini</u>	14	24	10	----
<u>Procladius</u> sp.	----	8	----	----
<u>Tribelos</u> sp.	----	----	2	----
<u>Polypedilum</u> sp.	----	----	----	2
Tipulidae (crane flies)				
<u>Limonia</u> sp.	----	----	1	----
<u>Tipula</u> sp.	----	----	1	1
<u>Dicronota</u> sp.	----	----	1	----
<u>Erioptera</u> sp.	13	2	----	----
<u>Filaria</u> sp.	----	2	----	----
Tabanidae (horse flies)				
<u>Chrysops</u> sp.	----	2	----	2
Culicidae (mosquitoes)				
<u>Aedes</u> sp.	4	----	----	----
Ptychopteridae (phantom crane flies)				
<u>Bittacomorpha</u> sp.	2	----	----	----
Simuliidae (black flies)				
<u>Simulium</u> sp.	----	----	56	5
Muscidae (house flies)				
<u>Lispe</u> sp.	----	2	----	----
Hydropsychidae (caddis flies)				
<u>Cheumatopsyche</u> sp.	----	----	56	2
<u>Hydropsyche bimaculata</u>	----	----	----	38
<u>Hydropsyche similata</u>	----	----	----	12
Perlodidae (stone flies)				
<u>Isonychia</u> sp.	----	----	6	----
Cordulegastridae (dragonflies)				
<u>Cordulegaster</u> sp.	----	----	6	1
<u>Erythromma</u> sp.	----	----	1	----
Dytiscidae (diving beetles)				
<u>Acilius</u> sp.	1	----	----	----
Gyrinidae (whirligig beetles)				
<u>Dineutus</u> sp.	----	----	2	----

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MACROINVERTEBRATE DATA
(con't)

ORGANISMS	B-1	B-1A	B-2	M-1
Elmidae (riffle beetles) <u>Macronychus</u> sp.	----	----	1	----
Sialidae (alder flies) <u>Sialis</u> sp.	----	10	2	1
Corydalidae (fish flies) <u>Gyrinus</u> sp. <u>Nigronia</u>	----	----	51	4
Tubificidae <u>Tubifex</u> sp.	----	20	----	3

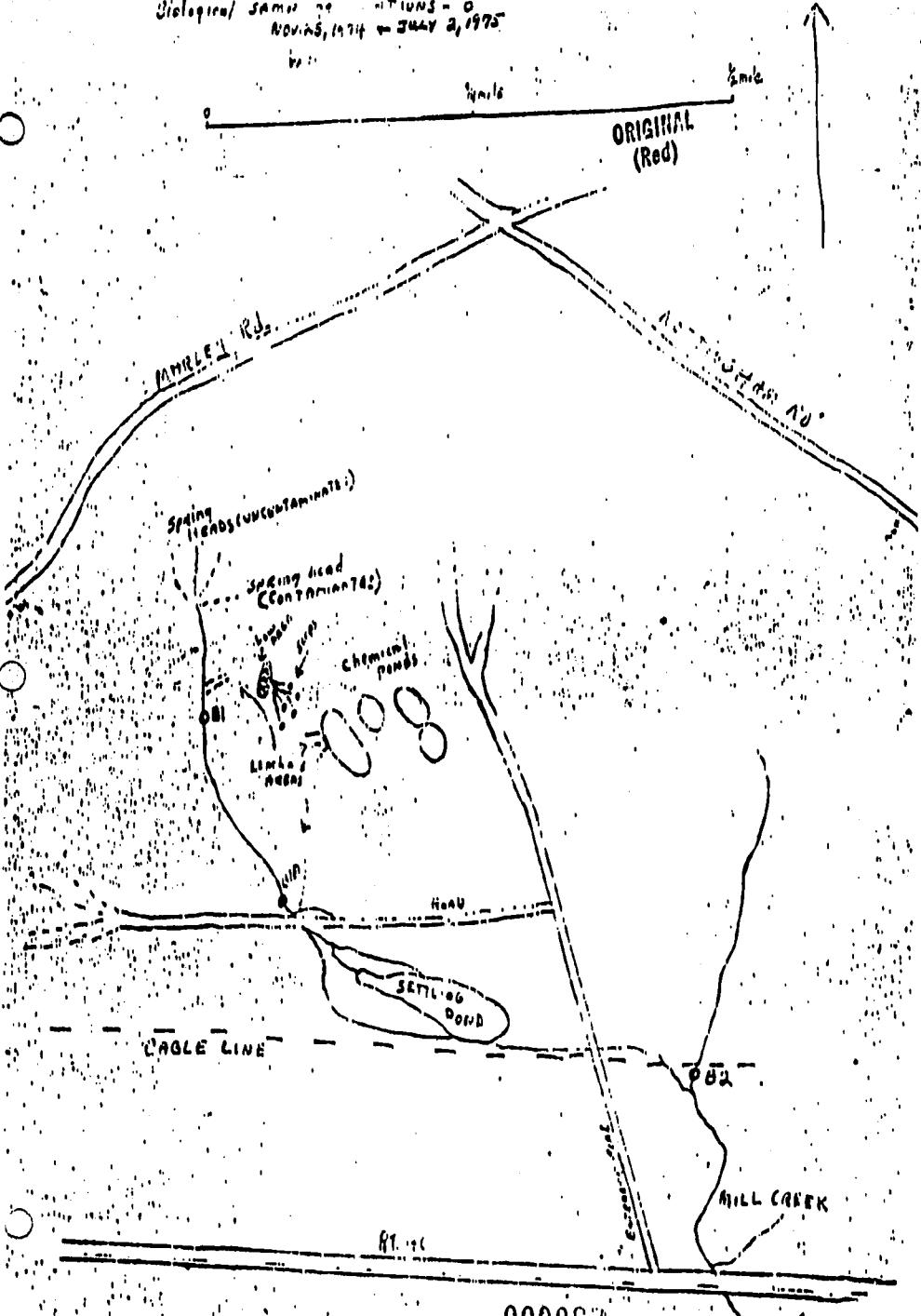
FISH DATA

150 feet sampled
at station M-1

American eel Anarhilla rostrata 4
Least Brook lamprey Lampetra aepyptera 10

000066

Sisological SAMSON 22 SITIONS = 0
NOV 25, 1974 - JULY 2, 1975



100-18

ORIGINAL
(Red)

Spring
heads (sub-contaminated)

Spring head
(contaminated)

Chromic
pools

081

Road

082

- - - SCALE LINE - - -

000065